REMARKS

In the Office Action, claims 1-14 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,317,625 to Olson et al.

In the Office Action, claims 1-14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-43 of U.S. Patent No. 6,658,283.

In response thereto, claims 1 and 8 have been amended and new claims 15 and 16 have been added. Accordingly, claims 1-16 are now pending. Following is a discussion of the patentability of each of the pending claims.

Preliminary Matter

In the Office Action, claims 1-14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-43 of U.S. Patent No. 6,658,283. In response thereto, a terminal disclaimer in compliance with 37 CFR Section 1.321(c) and signed by the undersigned attorney is enclosed herewith that obviates the above double patenting rejection.

Independent Claim 1

Claim 1 recites an implantable cardiac stimulation system comprising an implantable cardiac stimulation device and at least one implantable electrode coupled to the implantable cardiac stimulation device. The implantable electrode is operative to sense cardiac electrical activity and to provide an intracardiac electrogram signal. The system further comprises a filter to filter the intracardiac electrogram signal with a low frequency cutoff of no greater than about 1 to 2 HZ and a high frequency cutoff of no less than about 250 Hz to provide a filtered electrogram signal for display. The filtered electrogram signal has the appearance of a surface electrocardiogram.

The Olson et al. reference discloses an implantable medical device that addresses the problem of obtaining accurate voltage measurements within a patient's

body due to the effects of baseline wander. Baseline wander involves large amplitude, low-frequency, non-physiological signals that can saturate a measurement system, resulting in the loss of patient signal information. Sources of baseline wander include 1) patient movement, and 2) delivery of electrical stimulus to tissue in the region of the electrode. To address this problem, the implantable medical device has a signal measuring system for measuring physiologic signals having a relatively large effective dynamic range. In one embodiment, the system includes a high-pass filter (HPF), an analog-to-digital converter (ADC), a decimation filter (DF), and a compensation filter (CF). The HPF receives an input signal that includes the baseline wander imposed on a physiological signal. The HPF attenuates low frequency components of the input signal, and the ADC then oversamples the output signal of the HPF. The DF receives the output samples from the ADC and generates output samples at a rate twice the maximum frequency of the desired output signal. The CF then amplifies the low frequency end of the DF output samples. The gain and cutoff frequency of the CF are selected to offset the HPF attenuation of the low frequency components. However, nowhere does the Olson et al. reference disclose or suggest a filter to filter intracardiac electrogram signals to provide a filtered electrogram signal for display, wherein the filtered electrogram signal has the appearance of a surface electrocardiogram.

Accordingly, it is respectfully submitted that claim 1 is in condition for allowance. Claims depend from claim 6 and are similarly patentable.

Dependent Claims 2-7 and 15

Claims 2-7 and 15 depend from claim 1 and are similarly patentable. Accordingly, it is respectfully submitted that these claims are in condition for allowance.

Independent Claim 8

For at least the same reasons discussed previously with regards to claim 1, it is respectfully submitted that claim 8 is in condition for allowance.

Dependent Claims 9-14 and 16

Claims 9-14 and 16 depend from claim 8 and are similarly patentable. Accordingly, it is respectfully submitted that these claims are in condition for allowance.

CONCLUSION

In light of the above claim amendments and remarks, it is respectfully submitted that the application is in condition for allowance, and an early notice of allowance is requested.

Respectfully submitted,

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Date

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Enclosure: Terminal Disclaimer Under 37 CFR 1.321(c)

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